DEFENSE LOGISTICS AGENCY

XXI

Software Version Description for

DOD E-Business Exchange System

Version 3.0

May 2000

Inter-National Research Institute, Inc.
12350 Jefferson Avenue, Suite 400
Newport News, Virginia 23602

SVD for DEBX Version 3.0

Software Version Description for DEBX

Contents

List of Tables

This page has been intentionally left blank.

1.0 Scope

This Software Version Description (SVD) applies to Version 3.0 of DOD E-Business Exchange System (DEBX). This document follows the standards set forth in *Military Standard Software Development and Documentation* (MIL-STD-498) and in the *Data Item Description (DID) for a Software Version Description* (DI-IPSC-81442), as tailored by Inter-National Research Institute (INRI).

1.1 Identification

DEBX is a Computer Software Configuration Item (CSCI) of the system identified as Electronic Commerce/Electronic Data Interchange (EC/EDI).

1.2 System Overview

DEBX is being developed by INRI for the Defense Information Systems Agency (DISA) and the Defense Logistics Agency (DLA). The role of DEBX is to serve as a single interface between the Government and its commercial trading partners for conducting EC/EDI. DEBX must ensure interoperability, economies of scale, and compliance to standards set forth by the Department of Defense (DoD) and Federal Program Office (PO).

The functional objectives of DEBX are to:

- Provide rigorous end-to-end accountability within the DEBX system, with no single point of failure that could result in loss or nondelivery of data

- Implement a Relational Database Management System (RDBMS) for storage of data passing through DEBX

- Provide automated archive and retrieval mechanisms for messages and system configuration data

- Provide system performance information, including transaction statistics and communications status

1.3 Document Overview

The purpose of this document is to identify and describe the changes made to the DEBX CSCI in Version 3.0. (For descriptions of these changes, see Section 3.3.) This SVD also identifies any software problems that were corrected by the changes made in Version 3.0.

This document contains the following sections:

Scope
States the purpose of the EC/EDI system, describes the role of DEBX within EC/EDI, and states the purpose of this SVD. (Section 1.0)

Referenced Documents
Lists the documents applicable to this SVD. (Section 2.0)

Version Description
Lists the following items: changes made to DEBX for Version 3.0, materials that compose this release of software, OS patches included, possible problems and known errors with DEBX Version 3.0. (Section 3.0)

Notes
Defines the acronyms and abbreviations used in this SVD. (Section 4.0)

2.0 Referenced Documents

The following documents are referenced in this SVD. In the event of a later version of a referenced document being issued, the later version shall supersede the referenced version.

- *Data Item Description – Software Version Description* (DI-IPSC-81442), December 1994.

- *Military Standard – Software Development and Documentation* (MIL-STD-498), December 1994.

- *System Administrator's Guide for DOD E-Business Exchange System*, Version 3.0, INRI, May 2000.

3.0 Version Description

The following subsections describe DEBX Version 3.0.

3.1 Inventory of Materials Released

The following physical media and associated documentation compose DEBX Version 3.0.

Software

- *DEBX Applications Software* CD

- *DEBX COTS Software* CD

- *DEBX Translation Maps 3.0* CD

- *DEBX PC Help* CD

- *DEBX Application Help* CD

- *HP-UX Install and Core OS Software, April 1998, Version 11.00* CD

- *HP Instant Information CD, HP-UX Release 11.0*

- *Recommended Patches to the HP-UX Version 11.00 OS for DEBX Version 3.0* CD (This CD includes patches for both 700 series machines and 800 series machines.)

- *DEBX Documentation* CD

- *Map Segment Documentation* CD

Documentation

- HP-UX Instruction Sheet for Installing the Instant Information CD.

- *Mapper's Guide for DOD E-Business Exchange System, Version 3.0,* May 2000.

- *Release Notes for DAASC Web Server Interface, DEBX Version 3.0,* May 22, 2000.

- *Release Notes for SNMP Server, DEBX Version 3.0,* May 22, 2000.

- *Security Manager's Guide for DOD E-Business Exchange System, Version 3.0,* May 2000.

- *Software Version Description for DOD E-Business Exchange System, Version 3.0,* May 2000.

- *Software Version Description for Netscape Enterprise Server Segment, Version 2.01 for DEBX Version 3.0,* May 2000.

- *Software Version Description for Translation Maps Segment, Version 3.0 for DEBX Version 3.0,* May 2000.

- *System Administrator's Guide for DOD E-Business Exchange System, Version 3.0,* May 2000.

3.2 Inventory of Software Contents

This section has been tailored out.

3.3 Changes Installed

The following section describes the software fixes and enhancements that were integrated in DEBX Version 3.0. This information is grouped according to the following categories:

- Site Requests/Issues
- Alerts
- Audit/Logging
- Communications
- Databases
- Documentation
- Message Processing/Routing
- Miscellaneous
- Security
- Translation
- Updates 2.2.0.6–2.2.0.12

Site Requests/Issues

Some of the software changes integrated in DEBX Version 3.0 were implemented at the request of the DEBX administrators at the DMC sites. Table 3-1 provides a description of these software change requests (SCRs).

Table 3-1 Software Change Requests Submitted by DEBX Administrators

Number	Request/Issue	Refer to
EDR0111991722	Rejected email can only be accessed by one user at a time.	Message Processing/ Routing, *13*
EDR0126991502	Alertd process locks, resulting in the inability to bring up the menu bar.	Alerts, *1*
EDR0222992057	Can only access Alert Notifier when logged in as ecpn.	Alerts, *1*
EDR0223992330	Exiting the Non-Urgent Alert window removes all yellow entries.	Alerts, *1*
EDR0511991600	DEBX uses a single field in the routing database for both VAN routing and file name routing. These fields should be separated.	Message Processing/ Routing, *1*
EDR0803991948	The DEBX alert notification database can only hold 500 entries.	Alerts, *2*
EDR0819992112	Modem scripts are overwritten when a channel is started.	Communications, *12*
EDR0901991435	Modem channels only work when software is run by the user ecpn.	Communications, *1*
EDR0225001706	Emaild takes a long time to process large messages.	Version 2.2.0.11 (13 March 2000), *4*
SCR0223990353	Would like to be able to reroute from the message database.	Databases, *1*

Alerts

1. *Problem:* The alert daemon can become deadlocked. When this happens, alerts no longer work and the administrators can no longer run remote DEBX sessions. To correct this problem, the administrators must reboot the system.

    Solution: Redesigned the underlying structure of the alerts subsystem so that deadlocks no longer occur. This included migrating all alert data sources (alert notify and alert filter databases) to RPC databases.

2. *Problem:* The alert notification database is limited to 500 entries.

    Solution: Migrated the alert notification database, as well as the alert filter database to RPC databases allowing an unlimited capacity. Capacity is limited only by available disk space.

3. *Enhancement:* Added the Search dialog box to the Edit Alert Notification Message window.

4. *Problem:* When an FTP channel cannot delete a file after pulling it, the DEBX administrators are not notified of the problem.

    Solution: Added a new alert, FTP CANT DEL FILE, that is generated whenever an FTP channel cannot delete pulled files.

Audit/Logging

1. *Enhancement:* Implemented the ability to monitor DEBX processing using Simple Network Management Protocol (SNMP).

2. *Problem:* When searching an incoming channel log (In Channel Log Viewer) or an outgoing channel log (Out Channel Log Viewer) that contain many files, the RPCServer becomes unresponsive to other RPC requests.

    Solution: Modified the searching mechanism so that it is based on a client–server model. A search can now be performed efficiently without affecting other RPC operations.

3. *Problem:* Only one file at a time can be saved from the incoming channel log (In Channel Log Viewer) and outgoing channel log (Out Channel Log Viewer).

    Solution: Modified the incoming and outgoing channel log, so that more than one file at a time can be saved.

4. *Enhancement:* Added the Search dialog box to these windows:

    *   Raw Viewer
    *   Channel File Viewer

5. *Enhancement:* In the Message Log window, combined the First Requested and Last Requested options into the Request Range option that can be selected from the File menu.

6. *Problem:* Each process creates and populates its own session log, resulting in too many session logs.

   Solution: Modified the session logs so that a process and all of its children share the same log. For example, there will be one InXlator log, one OutXlator log, one Router log, and so on.

7. *Problem:* A channel that is configured to not generate the daily traffic report is not included in the system tallies.

   Solution: Modified the message reporter to ensure the proper collection of system tallies for all channels, regardless of the traffic report configuration.

Communications

1. *Problem:* Kermit does not run if someone other than the user that created the channels is running the system.

   Solution: When restoring the channels database, modified the archive/restore process to set the permissions as needed on the Kermit and ZMODEM script directories. (Other changes are already in place to set the permissions as needed when new channels are created.)

2. *Enhancement:* DEBX initiated FTP connections to a remote FTP server now support communications using Secure Socket Layer (SSL).

3. *Enhancement:* Implemented the ability for DEBX to receive messages that have been blocked. A blocked message contains lines that have been wrapped at a specified length.

4. *Enhancement:* Combined the Add Channel and Edit Channel dialog boxes into one application. Adding a channel is now just a one-step process.

5. *Enhancement:* Added a SECURITY tab to the Edit Channel window for all interfaces except SCP. This tab allows you to use Pretty-Good Privacy (PGP) as an encryption option for transmitting messages and a decryption option for receiving messages.

6. *Problem:* When deleting many messages from the outgoing email queues, there is no indication of what is happening.

   Solution: Added an hourglass cursor that appears when deleting messages from the Outgoing Email Queues window.

7. *Enhancement:* Added new icons to the Outgoing Email Queues window.

8. *Enhancement:* Added the capability for remote systems to pull files from DEBX via FTP. There is now a Remote Pull check box on the CONNECTION tab of the Edit Channel dialog box for FTP channels.

9. *Enhancement:* Converted the System Setup window from Java to Motif.

10. *Problem:* In the TRANSLATION tab of the Edit Channel window, there are so many message types in the list box that they do not all fit.

    Solution: Added a scroll bar to the list box so that you can scroll through the message types.

11. *Enhancement:* Added new icons to the Communications Manager.

12. *Problem:* Modem scripts are overwritten when a channel is started.

    Solution: Modified the modem processes to correctly set file permissions on modem scripts to prevent them from being overwritten.

Databases

1. *Enhancement:* Added the ability to reroute and retranslate messages from the Message Database window. Also added the ability to access a remote host's message database.

2. *Enhancement:* Migrated the Message Database window to use standard Motif instead of UIMX generated code. This migration was performed in support of the HP-UX 11.00 OS port.

3. *Enhancement:* Upgraded the version of Oracle from 7.3.2.2 to 8.0.4. This upgrade was performed in support of the HP-UX 11.00 OS port.

4. *Problem:* Storing point of contact and notes information for the trading partner database results in a large number of files. This can impede performance of archive/restore times.

    Solution: Created transaction objects for trading partner database entries. This allows information such as point of contacts and notes to be stored in one file.

5. *Problem:* Rebuilding of the trading partner database hash table can take 13 or more hours, which is unacceptable.

    Solution: Modified the DEBX database hash table mechanism to make it more robust, fast, and versionable. As a result, the hash table rebuild is now much faster. It takes less than one minute to rebuild the trading partner database hash table.

6. *Problem:* Restoration of the trading partner database takes much longer than it should because UNIX becomes very slow as the number of files in a single directory increases.

   Solution: Message objects, channel objects, alert objects, and trading partner database transaction objects are now stored in multiple subdirectories to optimize object creation and access time.

7. *Enhancement:* Implemented a web-based utility that allows searching of both the DEBX message database, as well as the DAASC DLA database.

Documentation

Enhancement: Created a new online Help system to replace the *Software User's Guide*. You can get online Help in two different ways — from the desktop of your personal computer (PC Help) or through the DEBX software (Application Help). If you run DEBX remotely from a PC, we recommend getting Help from the desktop of your PC. For instructions on installing DEBX PC Help and DEBX Application Help, see the instruction sheet included in the CD case for each. Once you have installed the Help system, use the Contents tab in the left pane to navigate the topics. To perform a full-text search, use the Search tab in the left pane.

If you get online Help through the DEBX Software (Application Help), you may need to adjust the font sizes in Netscape® Communicator™ for optimal viewing.

Message Processing/Routing

1. *Enhancement:* Added the ability to "and" routing criteria together to make a complex route. A message must match all of the criteria for a complex route.

2. *Enhancement:* Split File/Van Name routing criteria into two separate criteria. Split ISA/GS To routing criteria into two separate criteria.

3. *Enhancement:* In the Add Route and Edit Route dialog boxes, added the ability for all fields of a route, including source and destination channels, to accept any combination of literal and wildcard (* and ?) characters to represent patterns.

4. *Enhancement:* Added the ability to use the test indicator in the X12 ISA envelope as routing criteria. The criteria can be specified as production messages, test messages, or both.

5. *Enhancement:* Redesigned the Routing Database window to show each routing criteria in its own column.

6. *Enhancement:* Added a new Test Route dialog box to the Routing Database window. An administrator can enter message criteria, select OK or APPLY, and get a list of applicable route records back. The returned list shows all routes that could apply to the message.

7. *Enhancement:* Added a LAST USE column to the Routing Database window that informs the DEBX administrator of the last date that the route was applied to a message. These values are updated at least once per day. The administrators can use this column to select and delete the route records that are unused in the system.

8. *Problem:* Compression of messages greater than 28 MB results in zero-length messages due to memory allocation management problems.

   Solution: Modified the encoding and compression algorithms for objects to process the data in smaller chunks, reducing the amount of memory required for the operation.

9. *Enhancement:* Modified core processes so that they can detect a bad queue entry, delete it from the queue, and continue processing. When a bad entry is deleted from a queue, the queue record is printed to the session log of the process. Also, an email notification with a stack trace is sent to the email addresses specified by the system registry value for default.BugReportEmailAddress.

10. *Enhancement:* To assist DEBX administrators in managing a potentially large number of routing entries, added a data filter to the Routing Database window. This filter is similar to the filter already used in the Communications Manager window. The DEBX administrators can create, save, and delete a data filter.

11. *Enhancement:* Added new icons to the Routing Database window.

12. *Enhancement:* In the message log, error queue, and message database, the Reroute option has been renamed Reprocess and the Retranslate option has been renamed Reinject.

13. *Enhancement:* Modified DEBX to place rejected email messages in the error queue, where they can be reinjected. Removed the rejected email mailbox. Modified the system so that reinjected email messages can be viewed through the JDS Viewer and linkages to the original rejected message are displayed in the Linkages field of the JDS Viewer.

Miscellaneous

1. *Enhancement:* In order to support newer and more powerful HP platforms, the DEBX system has been ported to run under the HP-UX 11.00 Operating System.

2. *Enhancement:* In the GUIs, changed each occurrence of ECPN to DEBX.

Security

Problem: The security script locks up if there are any users in /h/USERS other than ecpn/secman/sysadmin.

Solution: Modified the security script so that it does not lock up when other users are in /h/USERS.

Translation

1. *Enhancement:* Provided the capability in DEBX for UDF message type families to do post processing on batch files before transmission. This is accomplished through placing the appropriate shared library and function (which performs the post processing) in the family's message description file.

2. *Enhancement:* Ported all of the translation code to use the Mercator Platform API, Version 1.4.2

Updates 2.2.0.6–2.2.0.12

This *Software Version Description* includes all of the updates since the last *Software Version Description for ECPN Version 2.2.0.5,* released in August 1999. These changes were delivered electronically with an accompanying Read Me file. This section lists those updates, grouped by version.

Version 2.2.0.6 (27 August 1999)

1. *Problem:* During translation, date fields that contain six-digit, leap year dates after the year 2000 are misinterpreted and rejected.

   Solution: Added a field to the Message Description file to designate a turnover year. Modified the InXlator and OutXlator to use this field when present.

2. *Problem:* The SCP communications interface has no associated alerts.

   Solution: Added the following SCP alerts:

   "MSG SCP channel could not push files"
   "MSG SCP channel could not pull files"
   "MSG SCP channel could not connect"

3. *Problem:* ECPN does not adequately address unsuccessful SCP connections.

   Solution: Modified SCP comms to either reattempt the connection or send an alert.

4. *Problem:* (EDR WEG-AR000031693 - HASH TABLE FOR TPDB OUT OF SYNCH) A software restart was delayed for more than 13 hours, because the trading partner hash table was no longer synchronized with the trading partner database and had to be reconstructed.

   Solution: Determined that the trading partner hash table appears out of date if the last operation performed on the trading partner database was a record deletion. Modified the trading partner database code to ensure that the hash table and the database remain synchronized after any operation.

5. *Problem:* ECPN 2.2.0.5 did not include the resolution to the following problem (originally resolved in the ECPN 2.2.0.4 delivery): When ECPN receives a message from a SAACONS UDF channel, ECPN correctly translates the message and sends it to the appropriate VAN. However, when ECPN receives a 997 functional acknowledgment from the VAN indicating that the message was received, ECPN incorrectly attempts to translate the 997 functional acknowledgment and send it to the SAACONS UDF channel (the message originator). The 997 functional acknowledgment should remain at the ECPN, the Government Point of Translation (GPot) for the original message. Note that this problem is a specific instance of a more general problem that was addressed in ECPN Version 2.2.0.3.

   Solution: Again, modified ECPN's routing logic to ensure that none of the transactions in a 997 functional acknowledgment are forwarded to the outgoing translator or an outgoing channel.

6. *Problem:* The ECPN 2.2.0.5 update included a fundamental change to channel traffic report generation to accommodate the new GTN-specific translation report(s) capability. As a result, channel traffic reports are no longer generated unless the channel's ADMIN tab setting is set to actually deliver the report. However, DMC-Ogden requires that all channel traffic reports be generated and available on the ECPN platform for internal data metrics collection.

   Solution: Modified the traffic report generator (MsgReporter) and the router to accommodate any of the following three settings for each selectable channel traffic report. (These settings are located on the ADMIN tab in the Edit Channel dialog box.)

   Generate only – (default) a traffic report will be generated but not sent. All new channels and any existing channels that are configured not to send traffic reports will inherit this setting.

   Generate and send – a traffic report will be generated and sent. Select if you want the report to be transmitted to the channel's admin path. All existing channels will inherit this setting for the enabled report(s).

   Do not generate – (new) a traffic report will not be generated.

Version 2.2.0.7 (23 September 1999)

1. *Problem:* During UDF-to-X12 translation for IPC, a large file causes the InXlator process to exceed the maximum number of file descriptors allowed. The InXlator process dies before it finishes processing this file. The maxfiles kernel parameter (set to a value of 1024) determines how many file descriptors can be open at one time for a single process.

   Solution: Modified the InXlator and OutXlator processes so that after each transaction in a file is translated, the file descriptors are closed. The value of 1024 for the maxfiles kernel parameter (recommended by the *System Administrator's Guide for Electronic Commerce Processing Node*) is now sufficient.

2. *Problem:* When processing several Central Contractor Registration (CCR) CANCEL TRADING PARTNER messages, the Router process dies. This leaves the trading partner database hash table out of synch with the trading partner database, causing a trading partner database hash table rebuild when the ECPN software is restarted.

    Solution: Modified the trading partner database to ensure that record deletions do not cause the Router to die.

3. *Problem:* When a trading partner database entry is deleted, the associated transaction history object is not deleted.

    Solution: Modified the mechanism for deleting trading partner database entries so that when an entry is deleted, the associated transaction object is also deleted.

4. *Problem:* The RPCServer died at the Ogden Defense Megacenter (DMC).

    Solution: After analyzing the processing actions of the RPCServer, corrected problematic memory references and resource losses.

5. *Problem:* If an ECPN process has an owner identification that has no associated home directory and that process is the first to create a directory, it can create a directory with incorrect permissions. This can cause other operations to fail.

    Solution: Set the default umask for ECPN processes to 007.

6. *Enhancement:* The CCR recently made a software change, and as a result, they are sending trading partner data with an invalid value for the Defense Logistics Information Service (DLIS) Data Universal Numbering System (DUNS) code (for the ISA Address and GS Address fields). The TPDBReplaceField application has been modified to search for the DLIS DUNS number and replace it with the generic value, VENDORS.

7. *Problem:* Removing a file from the IN_COMMS_FILES directory causes the Router to fail for SPS-EDA messages.

    Solution: Modified the Router to handle file deletions from this directory for SPS-EDA messages.

8. *Problem:* The trading partner database contains entries that have been incorrectly cleared of all data. This is a side effect of problem 2, described above.

    Solution: Developed the TPDB_RestoreEmptyEntries program to restore cleared entries using existing transaction objects.

Version 2.2.0.8 (09 December 1999)

1. *Problem:* (EDR11169915560) The current version of the File Transfer Protocol Daemon (ftpd) has security problems.

    Solution: Upgraded to the latest version of the ftpd (Version 2.6), which fixes these security problems.

2. *Problem:* Archiving the daily directories takes a long time.

    Solution: Reduced the time necessary to archive the daily directories.

3. *Problem:* During daily archiving, the message log and system log files are not archived properly. When the message logs are restored, the messages do not appear in the Message Log window.

    Solution: Modified the daily archive/restore process so that all files are properly archived. For daily archives that are missing messages in the message log, developed a utility named rebuild_msg_log, which recreates the message log from a restored day's data. To run the utility, restore the data and then enter the following at the command prompt, substituting the day to rebuild for <YYYY-MM-DD>:

    rebuild_msg_log <YYYY-MM-DD>

    The rebuild_msg_log utility will not overwrite an existing log file.

4. *Problem:* Channel objects are not archived when channels are archived.

    Solution: Modified the data file that determines what files to archive to include channel objects.

Version 2.2.0.9 (28 January 2000)

1. *Enhancement:* For SPS-EDA, added daily traffic reports. The daily traffic reports contain a summary of all SPS-EDA data received for a particular day and are furnished in CSV format.

2. *Enhancement:* Added time stamps to the archdaily process logs to mark the starting and ending times for archive and restore processes.

3. *Problem:* (EDR1220991945) The Daily Archive - Restore window only works if the user is logged in as ecpn.

    Solution: Modified the software so that all users can use the Daily Archive - Restore window.

4. *Problem:* The Daily Archive - Restore window works improperly when erroneous archive paths are used.

   Solution: Improved archive path verification for the Daily Archive - Restore window.

5. *Problem:* FTP site commands are limited to 80 bytes.

   Solution: Removed the 80 byte restriction on site commands so that the maximum length is limited only by disk space.

Version 2.2.0.10 (11 February 2000)

1. *Problem:* UDF messages received on passive FTP channels fail translation due to permission problems.

   Solution: Modified the /etc/inetd.conf entry for ftpd to have a proper umask setting. This ensures proper permission settings for files passed to the translator.

2. *Problem:* When incoming SPS-EDA messages are translated, ICN and GCN values are reset to their starting values.

   Solution: For SPS-EDA translations, modified the incoming translator to prevent the ICN and GCN values from being reset.

3. *Problem:* Editing an active FTP channel can cause the RPCServer to lock, resulting in unresponsive GUIs.

   Solution: An FTP channel maintains a lock on the associated channel object file during the entire communications session, preventing the RPCServer from accessing the channel object file during that time. This access delay is most evident when attempting to edit an FTP channel with many messages to push/pull, or when a channel fails to connect and has a moderately long retry delay and/or a large number of retry attempts. FTP sessions were modified to minimize the time that a channel object is locked.

Version 2.2.0.11 (13 March 2000)

1. *Enhancement:* Typically, a message that is received on a UDF channel, and then transmitted out another UDF channel does not result in the generation of an X12 997 acknowledgment message during X12-to-UDF translation. However, for messages received on a Car Location Message (CLM) channel that are routed to a Global Transportation Network (GTN) channel for X12-to-UDF translation, the X12 997 acknowledgment map is now invoked. This map is invoked to generate the data required for the GTN data quality and data timeliness reports. Because acknowledgments cannot be transmitted from CLM channels, clear the ENABLE 997/824 ACKNOWLEDGMENT DELIVERY check box in the ADMIN tab of the Edit Channel dialog box.

2. *Enhancement:* Created a new utility named db_report_tool. This utility automates queries of the message database. To run this utility, follow these steps:

   a. When you download the update (as described in #2 of the Installation below), download these two files: db_report_tool.config and _crontab.

   b. Copy the db_report_tool.config file to /h/data/global/EC/System.

   c. Change directories to /h/data/global/EC/System.

   d. At the command prompt, enter the following commands:

      chmod 660 db_report_tool.config

      chown ecpn:hawk db_report_tool.config

   e. Customize the db_report_tool.config file to specify which fields in the database to query and specify other reporting parameters.

   f. Copy the entries in the report_crontab file to your crontab file and customize them as necessary.

3. *Problem:* A channel that sends acknowledgments to an email address sometimes shows a backlog in the Communications Status window, but the channel does not have any messages in the outgoing channel queue.

   Solution: The invalid backlog value in the Communications Status window actually indicates the backlog in the email domain queue for the acknowledgment address. Modified the Communications Status window backlog setting to exclude email message processing.

4. *Problem:* (EDR 0225001706/TT #45508) Email messages that are placed in the rejected email mailbox are first stripped of all carriage returns. For large messages that contain several megabytes, this process may take several hours, during which time no other incoming email messages can be processed.

   Solution: Streamlined the process that strips out the carriage returns. Large messages that used to take several hours to process, now take a few seconds.

Version 2.2.0.12 (31 March 2000)

1. *Enhancement:* Added Secure Socket Layer (SSL) as an option for active FTP channels. The SSL check box can be selected in the FTP TRANSFER tab of the Edit Channel dialog box. SSL allows for encrypted data transfer between DEBX and a remote host.

2. *Enhancement:* Modified the FTP communications libraries to use ncftp.

3. *Enhancement:* Added a PASSIVE MODE check box to the FTP TRANSFER tab of the Edit Channel dialog box. Passive mode uses the FTP control port (21) for data transfer and is used for connections that must be made through some firewalls.

3.4 Adaptation Data

The DEBX CSCI is the same for all sites. Adaptation of DEBX software is completely driven by configuration files. All adaptation data is stored in files that are read by DEBX when configuring the system for a site. These configuration files are resident on the CD used in the initial installation process.

3.5 Related Documents

In addition to the documents released with DEBX Version 3.0 (listed in Section 3.1), the following documents are pertinent to the DEBX CSCI. In the event of a later version of a document being issued, the later version shall supersede the referenced version.

*   *Software Design Description for DOD E-Business Exchange System, Version 3.0*, INRI, May 2000.

*   *Software Requirements Specification for DOD E-Business Exchange System, Version 3.0*, INRI, April 2000.

*   *Software Test Plan for DOD E-Business Exchange System, Version 3.0*, INRI, May 2000.

3.6 Installation Instructions

This section provides special instructions for installing the operating system (OS) and the DEBX software on Hewlett Packard (HP®) 9000 Series 800 platforms (e.g., K410 and T500) and HP 9000 Series 700 platforms (e.g., J210).

IMPORTANT INSTALLATION NOTES

Before installing DEBX, you should read Section 3.7, Possible Problems and Known Errors, because some of the items listed there may be related to the installation process.

The installation instructions are updated for each new version of DEBX. You should follow these instructions *each time* that you install DEBX to avoid unnecessary complications.

This section contains the following subsections:

- Recommended HP OS Patches
- Conversion Instructions
- Installation Instructions

3.6.1 Recommended HP OS Patches

IMPORTANT: It is recommended that the HP-UX Version 11.00 Operating System patches listed in Table 3-2 are installed before installing the DEBX Version 3.0 software. The recommended patches listed in this table are applicable to both HP® 9000 Series 700 and Series 800 platforms. Patches that already exist on your machine will not be reloaded.

For instructions on installing these patches, see Section 7.4.1 of the *System Administrator's Guide for DOD E-Business Exchange System.*

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms

Name	Description
PHCO_13753	HP-UX Patch Tools and White Paper
PHCO_13812	fixes dump(1M) handling of active files
PHCO_13828	ex(1), vi(1) patch
PHCO_13966	cpio(1) - Fix -p to report number of blocks
PHCO_13983	df(1M) cumulative patch
PHCO_14194	quota(1) patch for NFS-quotas
PHCO_14229	prof(1) patch
PHCO_14230	gprof(1) patch
PHCO_14244	vxdump (1M) patch
PHCO_14416	Obsolete Header Files Removal Patch
PHCO_14419	restore(1M) fix for cross-platform archives
PHCO_14600	patch for lif commands
PHCO_14627	mountall(1M) patch; mount cachefs after nfs
PHCO_14663	kernsymtab patch for update hang
PHCO_14733	cumulative passwd(1) patch
PHCO_14777	patch for reboot
PHCO_14778	cu(1) patch
PHCO_14779	ct(1) patch
PHCO_14810	year 2000 fix for power_onoff
PHCO_14812	acctcon1(1m) patch
PHCO_15220	sar(1M) Year 2000 fix
PHCO_15231	cumulative libpam patch
PHCO_15448	libpam.1 patch

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description
PHCO_15932	clean_tmps patch
PHCO_16039	libnss_files cumulative patch
PHCO_16127	su(1) cumulative patch
PHCO_16149	csh(1) cumulative patch
PHCO_16192	grep(1),egrep(1),fgrep(1) patch
PHCO_16195	mc(1m) bug fixes and enhancements
PHCO_16196	pwck(1M) cumulative patch
PHCO_16244	vxrestore(1M) patch
PHCO_16280	du(1) value for non-HP NFS systems incorrect
PHCO_16312	uucp(1) cumulative patch
PHCO_16341	HP AutoRAID Manager cumulative patch
PHCO_16405	cumulative fbackup(1M)/frecover(1M) patch
PHCO_16421	kmtools fix to prevent losing vmunix.prev
PHCO_16438	PFS cumulative patch
PHCO_16527	eucset(1) patch
PHCO_16703	fsck_hfs(1M) bad directory size calculation
PHCO_16704	config: increase table size for driver libs
PHCO_16720	st(1) New shared tape administration command
PHCO_16748	mt(1) new reserve, release, status options
PHCO_16795	memory windows cumulative patch
PHCO_16847	XCurses cumulative patch
PHCO_16871	adb cumulative patch
PHCO_16885	pax(1) restoring hard and soft links
PHCO_16965	rcs(1) Year 2000 cumulative patch
PHCO_17076	Year 2000 cumulative sccs(1) patch
PHCO_17243	envd(1M) patch
PHCO_17439	top(1) cumulative patch
PHCO_17441	DLKM configuration tools cumulative patch
PHCO_17454	mkfs_hfs VxVM coexistence patch
PHCO_17455	mkfs_vxfs VxVM coexistence patch

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description
PHCO_17503	envd.conf patch
PHCO_17622	libsec pty patch
PHCO_17712	Year 2000 nroff(1) cumulative patch
PHCO_17809	sort(1) cumulative patch
PHCO_17867	ioinitrc, assign ttys for B,C class systems
PHCO_18074	lpspool subsystem cumulative patch
PHCO_18132	Year 2000 HP-UX Operating System Patch Tool
PHCO_18183	Software Distributor (SD-UX) Cumulative Patch
PHCO_18228	libc man page cumulative patch
PHCO_18229	libc cumulative header file patch
PHCO_18276	cumulative date(1) patch
PHCO_18316	mount(1M) cumulative patch
PHCO_18332	ttytype(1) patch
PHCO_18333	stty(1) cumulative patch
PHCO_18374	ipcs(1) patch
PHCO_18445	pwgrd(1M) cumulative patch
PHCO_18447	sh-posix(1) cumulative patch
PHCO_18489	Release Notes and Release Notes Addendum
PHCO_19047	cumulative SAM/ObAM patch
PHCO_19292	login(1) cumulative patch
PHCO_19571	Array Manager/60 cumulative patch
PHCO_19666	libpthreads cumulative patch
PHCO_19945	bdf(1M) patch to skip autofs file systems
PHCO_20182	mksf(1M) cumulative patch
PHCO_20765	11.00 libc cumulative patch
PHCO_20882	fsck_vxfs(1M) cumulative patch
PHKL_14026	mtstart() Page fault,tape0 Hang,Panic patch
PHKL_14763	JFS extended map inodes cause fsck failure
PHKL_14765	Fixes HFS Panic in alloccgblk

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description
PHKL_14807	scsi3 cumulative patch
PHKL_14999	pthread(3t) man page defect fix
PHKL_15489	setsid, setpgrp, and setpgrp3 manpages
PHKL_15547	Recompile with optimization for performance
PHKL_15687	mk_kernel:Eliminate debug related warnings
PHKL_15689	AutoFS support patch
PHKL_16023	VxFS Corruption after crash, data page fault
PHKL_16074	KI nfs performance fix and KI panic fix
PHKL_16209	fix race conditions in UP emulation
PHKL_16807	DLKM unloading and Open bug with autoloading
PHKL_16981	Fix for panic in scr_bltb() and scr_bltf()
PHKL_16983	Return correct value for open()
PHKL_17038	Data Page Fault when field vmtrace'ng fix
PHKL_17043	Panic possible on heavily fragmented vxfs fs
PHKL_17048	Obsolete /usr/include/machine/space.h
PHKL_17358	Enable SCSI floppy for 64 bit computers
PHKL_17368	SCSI Pass thru driver cumulative patch
PHKL_18325	Prevent load 32-bit kernel on 64-bit system
PHKL_18541	Updated linkorder files
PHKL_18543	PM/VM/UFS/async/scsi/io/DMAPI/JFS/perf patch
PHKL_19080	new tape support, detect fix for 9840 tape
PHKL_19169	Correct VxFS process hangs
PHKL_19287	LVM failover to alternate path failure
PHKL_19321	diag0 cumulative patch
PHKL_19416	Fibre Channel Mass Storage Driver Patch
PHKL_19734	diag1 add PCI subvendor info,FC card support
PHKL_19800	fix unmount and MMF VxFS hangs
PHKL_20186	LVM Cumulative patch
PHKL_20202	Fix pthread error return, nfs/tcp panic

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description
PHNE_13422	ppp(1) patch
PHNE_14618	Bind 4.9.7 components
PHNE_14644	rbootd cumulative patch
PHNE_14820	telnet(1) patch
PHNE_15537	Fibre Channel cumulative patch
PHNE_16091	r-commands cumulative patch
PHNE_16158	ping(1) patch
PHNE_16159	traceroute(1) patch
PHNE_16390	mailx(1) patch
PHNE_16520	arp(1M) patch
PHNE_17027	inetd(1M) cumulative patch
PHNE_17190	sendmail(1m) 8.8.6 patch
PHNE_17434	netstat cumulative patch
PHNE_17829	bootpd(1M)/DHCP cumulative patch
PHNE_18218	nettl(1M) & nettladm cumulative patch
PHNE_18272	Cumulative Mux and Pty Patch
PHNE_19620	ONC cumulative patch
PHSS_13408	CDE Localized Help Dec97 Cumulative Patch
PHSS_13409	CDE Loc Action/Res Dec97 Cumulative Patch
PHSS_14578	HP C++ core library components (A.12.10)
PHSS_14581	libm patch
PHSS_14826	Update man page for gang scheduling
PHSS_15840	X11 64 bit runtime cumulative patch
PHSS_16649	Receiver Services October 1998 Patch
PHSS_16849	LIBCL patch
PHSS_16931	milli.a cumulative patch
PHSS_17116	CPSlib Cumulative Patch
PHSS_17421	XClients JAN 99 Cumulative Patch
PHSS_17535	Font Server JAN 99 Cumulative Patch
PHSS_17810	HP DCE/9000 1.7 Runtime cumulative patch

Table 3-2 HP-UX Version 11.00 Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description
PHSS_18649	Assembler patch
PHSS_19866	ld(1) and linker tools cumulative patch
PHSS_19964	X/Motif2.1 Runtime OCT99 Periodic Patch
PHSS_20141	Xserver cumulative patch
PHSS_20145	CDE Msg Cat OCT99 Cumulative Patch
PHSS_20716	CDE Runtime DEC99 Periodic Patch

3.6.2 Conversion Instructions

You must perform two manual data conversions after installing DEBX Version 3.0.

1. All alert filters must be reconfigured in the Alert Display Filter window.

2. For passive FTP channels, the system cannot determine which channels (configured in ECPN Version 2.2) receive data from a remote site. Therefore, this configuration must be done manually after installing DEBX Version 3.0. The following information must be specified in the Edit Channel dialog box for each channel affected:

    a. In the INCOMING DATA box in the CONNECTION tab, select the REMOTE PUSHES option button.

    b. In the REMOTE USER box in the CONNECTION tab, enter the user name in the USER NAME field. This name should correspond to the system login (UNIX) name.

    c. In the INCOMING tab, specify the 'PUSH TO PATH' and 'PUSH TO FILE MASK'.

    See the Help system for more information about entering the proper values in these fields.

3.6.3 Installation Instructions

Instructions for installing DEBX are provided in Section 7 through Section 7.4 of the *System Administrator's Guide for DOD E-Business Exchange System.* These instructions change and thus must be followed *each time* that you install a new version of DEBX.

3.7 Possible Problems and Known Errors

1. *Problem:* (PC Help System) In the Print Topics dialog box (opened by clicking Print), selecting the Print the selected heading and all subtopics option results in an Internet Explorer Script Error and causes the Help system to lock.

   Work-around: Close the Help system and reopen it.

2. *Problem:* (Application Help System) In the Index tab of the left pane, when you click certain words, the associated topics do not display.

   Work-around: Use the Search tab to enter the word and find the associated topics.

4.0 Notes

The following acronyms and abbreviations appear in this document:

API: Application Programming Interface

CAGE: Commercial and Government Entity Code

CCR: Central Contractor Registration

CSCI: Computer Software Configuration Item

CSV: Comma Separated Variable

DEBX: DOD E-Business Exchange System

DID: Data Item Description

DISA: Defense Information Systems Agency

DoD: Department of Defense

DUNS: Data Universal Numbering System

EC/EDI: Electronic Commerce/Electronic Data Interchange

EDA: Electronic Document Access

FTP: File Transfer Protocol

GTN: Global Transportation Network

GUI: Graphical User Interface

INRI: Inter-National Research Institute

IPC: Integrated Paying and Collecting

JDS: Journal Data Summary

MSN: Message Sequence Number

OS: Operating System

PGP: Pretty-Good Privacy

PO: Program Office

POC: Point of Contact

RDBMS: Relational Database Management System

SAACONS: Standard Army Accounting and Contracting System

SNMP: Simple Network Management Protocol

SPS: Standard Procurement System

SSL: Secure Socket Layer

SVD: Software Version Description

TPDB: Trading Partner Database

UDF: User Defined File

VAN: Value Added Network

This page has been intentionally left blank.